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EXAMINER

SCHWARTZ, JORDAN MARC

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 04/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/602,013

Applicant(s)

BLUM ET AL.

Examiner

Jordan M. Schwartz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 259-304 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 259-271 and 273-304 is/are rejected.
- 7) ☒ Claim(s) 272 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,7,8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Oath/Declaration*

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it states "original, first and sole inventor" and there is more than one inventor.

### *Drawings*

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Information Disclosure Statement*

The information disclosure statements filed in this case fail to comply with 37 CFR § 1.56(b), which states that information is material to patentability which it is **NOT CUMULATIVE** to information...being made of record in the application. Applicant has cited six pages of references for consideration and additionally has cited an entire magazine (Eye Care Business) without setting forth relevant pages within. The examiner believes that the thick stack of references for consideration is largely cumulative and, therefore, based upon the large number of references cited, the initialed references have been considered in a cumulative manner.

The information disclosure statement filed October 4, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each

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publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Specifically, the reference "Profile" was missing a page (page 8 was not legible) and therefore this reference has been crossed out and has not been considered.

### ***Specification***

The disclosure is objected to because of the following: on page 1, the reference to serial number "60/142,626" should apparently be corrected to "60/143,626" and appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 259-265, 268-269, 275, 278, 283, 285-292, 296-297 and 304 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document no. 55-76323 (hereinafter referred to as "Japanese'323").

Japanese'323 reads on these claims by disclosing the limitations therein including the following: an optical system comprising a lens having a first focal length

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(see entire document and Figure 1 re the "main part" i.e. the distant vision part as the "first focal length"); an electro-active region coupled to the lens (English abstract and Figure 1 re liquid crystal within the cavity part "4" that is "coupled" to the main part); the electro-active region when activated altering the focal length of a first portion to a second focal length different from the first focal length (entire document re when activated the focal length of the distant vision part that corresponds to cavity part "4" becomes a near and intermediate part therefore the focal length of the near or distant part after activation can be considered as the "second focal length"). Japanese'323 further discloses a controller (see entire document). Japanese'323 further discloses that the spectacles can have an auto focuser, which would inherently require containing the power prescription of the eye of the user and would inherently require the use of a rangefinder. In reference to claims 262-263, Japanese'323 discloses that when activated the portion "4" changes from a distant part to a near and intermediate part (see entire document) and therefore the near part can be considered as the "second focal length" and the intermediate part as the "third focal length". Japanese'323 further discloses the fixed outer surface with a radius of curvature proportional to that of the lens adjacent the electro-active region (Figure 1a i.e. either surface can be considered as the "outer" surface). It is believed that the electro-active region would inherently be adapted to correct to 20/20 vision, this being reasonably based upon lenses typically providing for at least this amount of correction. Japanese'323 further discloses the electro-active region off-center of the lens (Figure 1b); the electro-active region including a liquid crystal (English abstract). In reference to claims 289-292, the "main

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part" of the lens and the "ball part" when not activated is disclosed as a distance vision portion (see entire document). Therefore, if the electro-active region failed, the system would inherently revert to a distance vision focal length, which is the focal length of the lens. In reference to claim 304, Japanese'323 discloses a lens having a fixed focal length (see entire document i.e. the focal length of the main part not effected by activation as a distant vision correcting part); an electro-active region coupled to it (English abstract and Figure 1 re ball part "4"); the coupled lens and electro-active region creating more than one simultaneous focal length when activated (see entire document). The simultaneous focal lengths can either be considered as the distant vision focal length in the main part (which is unaffected by the activation) and the focal length of the near part when activated or can be considered as the focal length of the near part and the intermediate part as the two differing focal lengths.

Claims 259, 264-265, 267-269, 274, 277-278, 289-293, 295-297, 302 and 304 are rejected under 35 U.S.C. 102(b) as being anticipated by Mandell patent no. 5,108,169.

Mandell reads on these claims by disclosing the limitations therein including the following: an optical system comprising a lens having a first focal length (column 6, lines 3-26 in that the focal length of the central zone prior to activation can be considered as the "first focal length"); an electro-active region coupled to the lens and when activated altering the focal length to a second focal length differing from the first focal length (column 6, line 11 i.e. the near vision focal length differing from the focal length prior to activation). In reference to independent claim 304, Mandell discloses a lens having a

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first focal length (Figure 2, column 1, lines 24-36 which describe concentric bifocals having an optical zone in the "most central portion of the lens" and a concentric outer zone. The focal length of the concentric outer zone can be considered as the "fixed focal length"). Mandell further discloses that "the most central portion of the lens" can have an electro-active region coupled to it (column 6, line 3); and when activated will create two simultaneous focal lengths (column 6, lines 3-26, the two simultaneous focal lengths being the concentric outer zone which is unaffected by the activation and the focal length of the central zone created by the activation). Mandell further discloses the fixed outer surface with a radius of curvature proportional to that of the lens adjacent the electro-active region (Figure 1). Mandell further discloses that the electro-active region can comprise a diffractive surface (column 6, line 27); It is believed that the electro-active region would inherently be adapted to correct to 20/20 vision, this being reasonably based upon lenses typically providing for at least this amount of correction. Mandell further discloses the electro-active region centered of the lens (Figure 2, column 6, lines 3-26); the electro-active region including a metallic layer and a liquid crystal (column 4, lines 34 to column 5, line 5). In reference to claims 289-292, Mandell discloses that the lens can be a concentric lens having an outer circumferential zone of distant power (column 1, lines 24-36 and column 6, lines 3-26). Therefore, if the electro-active region failed, one could still view through this distant vision zone since it is not affected by the activation and therefore the system would inherently revert to a distance vision focal length, which is the focal length of the lens. In reference to claim 293, the activated region is a near vision part which is disclosed as the central portion of the lens

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(figure 2, column 6, lines 3-26 and in figure 2 the central portion is disclosed as being intermittently above a 180 degree meridian of the lens.

Claims 259-261, 264-269, 274, 278, 282-283, 285-288, 293-300, and 302-303 are rejected under 35 U.S.C. 102(b) as being anticipated by Piosenka patent no. 5,359,444.

Piosenka reads on these claims by disclosing the limitations therein including the following: an optical system comprising a lens having a first focal length (Figure 8, column 4, line 20, i.e. lens shaped shell "41" as a lens with a first focal length); an electro-active region coupled to the lens (column 4, lines 18--33 i.e. the liquid crystal material as within the shell and therefore "coupled" to the lens shell); and when activated altering the focal length to a second focal length differing from the first focal length (abstract). Piosenka further discloses a controller containing the power prescription of the user (column 5, line 46 and column 6, line 30). The outer shell of the lens can be considered as the fixed outer surface of the electro-active material since it defining the outer boundary of the material. Piosenka further discloses that the electro-active region can be in the form of pixilated regions (column 4, line 33 to column 5, line 8); that the electro-active region can include a diffractive surface (column 4, line 23). It is believed that the electro-active region would inherently be adapted to correct to 20/20 vision, this being reasonably based upon lenses typically providing for at least this amount of correction. Piosenka further discloses the electro-active region centered of the lens (Figure 8); including a liquid crystal (abstract); the controller receives info containing data where a user is looking (column 6, line 4); and a range finder (column 5,



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line 57 to column 6, line 25). In reference to claim 293, when activated and when viewing a near object the electro-active region will define a near vision region and since it is located throughout the optical zone (Figure 8) then it will inherently include a portion intermittently above a 180 degree meridian of the lens. In reference to claims 282 and 298-300, Piosenka further discloses the electro-active region adjusting for astigmatism (column 6, lines 30-41) and will therefore inherently subtract out or offset the astigmatism created by the correction and correcting for prism (column 6, line 34) and therefore will inherently include a "prismatic zone".

Claims 259-261, 264-269, 274, 278, 283, 285-286, 293-297, and 301 are rejected under 35 U.S.C. 102(b) as being anticipated by Kern patent no. 4,601,545.

Kern reads on these claims by disclosing the limitations therein including the following: an optical system comprising a lens having a first focal length (Figures 7a and 7b and column 6, lines 33-51 i.e. the fresnel lens can be considered the lens having the first focal length). Kern further discloses an electro-active region coupled to the lens (column 6, line 38); and when activated altering the focal length to a second focal length differing from the first focal length (abstract). Kern further discloses a controller (column 3, lines 18-24) and will inherently containing the power prescription of the user since it is adjusting the focus of the user based upon stored and provided information. Kern further discloses an outer fixed surface having a radius proportional to the lens (column 6, line 38); that the region can include a plurality of pixelized regions (Figures 2 and 5a); that the electro-active region can include a diffractive surface (column 6, lines 33-51). It is believed that the electro-active region would inherently be adapted to correct to 20/20

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vision, this being reasonably based upon lenses typically providing for at least this amount of correction. Kern further discloses the electro-active region can be between two fixed surfaces of the lens (Figure 3 embodiment with 70a and 70b being considered the lens and inherently having a focal length based upon their curvature); the electro-active region centered of the lens (Figures 2 and 7a); including a liquid crystal (column 4, line 6). In reference to claims 283 and 285-286, an intraocular lens (abstract) would inherently include a haptic coupled to the lens for support within the eye. In reference to claim 293, when activated and when viewing a near object the electro-active region will define a near vision region and since it is located throughout the optical zone (Figures 3 and 7b) then it will inherently include a portion intermittently above a 180 degree meridian of the lens. Kern further discloses that the lens can be a semi-finished lens blank (column 7, line 4).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 270-271, 273, 276 and 279-281 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piosenka et al or Japanese'323.

In reference to claims 270-271, 273 and 279-281, Piosenka et al and Japanese'323 disclose as is set forth above and further disclose the lens used for Eyeglasses (see abstract of both). However, nether specifically discloses the eyeglass

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lenses having a scratch resistant coating, anti-reflective coating, axis correction for a user, tint or photochromic effect. However, it is well known in the art of eyeglass lenses for such lenses to include these features (including being electro-activated), for the purpose of providing eyeglasses of improved durability, cosmetic effect and visual correction. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the eyeglasses of either Piosenka et al or Japanese'323 as including these additional features since, it is well known in the art of eyeglass lenses for such lenses to include these features for the purpose of providing eyeglasses of improved durability, cosmetic effect and visual correction.

In reference to claim 276, Piosenka et al and Japanese'323 disclose as is set forth above and, as stated in the rejections above, further disclose the liquid optical material as liquid crystal material. Neither Piosenka et al or Japanese'323 disclose the material as a polymer gel. However, it is well known in the art of electro-active materials for such materials to include the use of polymer gels in order to provide the required electro-active properties. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the liquid optical material of Piosenka et al or Japanese'323 as a polymer gel material since it is well known in the art of electro-active materials for such materials to include the use of polymer gels in order to provide the required electro-active properties.

Claim 284 is rejected under 35 U.S.C. 103(a) as being unpatentable over Piosenka et al or Japanese'323 in view of Quaglia.

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In reference to claim 284, Piosenka et al and Japanese'323 disclose as is set forth above but do not disclose the lens system supported by a phoropter. However, applicant is in effect claiming the lens system for use with a phoropter. It has been held that a recitation to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the lenses of Piosenka et al or Japanese'323 supported by a phoropter since both Piosenka et al and Japanese'323 disclose all of the structural limitations of the lens system and the supported by a phoropter goes to the intended use of the lens system. Regardless, Quaglia teaches that eyeglass lenses that provide variable focusing (Figure 17, column 12, line 56 to column 13, line 13) can further be supported by a phoropter in order for the lenses to be used for eye examination (figure 21, column 13, line 44 to column 16, line 20). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the lenses of either Piosenka et al or Japanese'323 as supported by a phoropter since Quaglia teaches that eyeglass lenses that provide variable focusing can further be supported by a phoropter in order for the lenses to be used for eye examination.

***Allowable Subject Matter***

Claim 272 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, none of the prior art either alone or in combination disclose or teach of the claimed optical lens system comprising a lens having a first focal length, an electro-active region coupled to the lens, the electro-active region when activated, altering the focal length of a first portion of the lens system to a second focal length different from the first focal length and specifically further wherein the lens has two fixed focal lengths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (703) 308-1286. The examiner can normally be reached on Monday to Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.

A handwritten signature in black ink, appearing to read 'J. Schwartz', written in a cursive style.

Jordan M. Schwartz  
Primary Examiner  
Art Unit 2873  
April 4, 2002